



# **Section I**

## ***200 Area Materials & Waste Management***

### **PROJECT MANAGERS**

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## INTRODUCTION

The 200 Area Materials and Waste Management consists of Project Baseline Summary (PBS) RL-CP02, Work Breakdown Structure (WBS) 3.3.2, except for ERDF.

NOTE: Unless otherwise noted, all information contained herein is as of the end of May 2002.

Fiscal-year-to-date (FYTD) milestone performance (EA, DOE-HQ, and RL) shows that one milestone was completed early.

## NOTABLE ACCOMPLISHMENTS

**Mixed Low Level Waste (MLLW) Treatment** — Completed receipt of non-thermally treated MLLW from ATG. All waste shipped to ATG in FY 2001 and FY 2002 for non-thermal treatment has been successfully treated and returned.

**Liquid Waste Processing** — Processed over 17.1 million gallons of wastewater through the 200 Area Effluent Treatment Facility (ETF) thus far in FY 2002 supporting a variety of generators, including the Environmental Restoration Contractor (200-UP-1 Groundwater).

**Waste Encapsulation and Storage Facility (WESF) Operations** — Completed installation of Pool Cell cleaning equipment.

**Plutonium Finishing Plant (PFP) Support** — The fourth shipment of Sand, Slag and Crucible (SS&C) waste, including 15 drums were received for storage in support of the Residues Project during May. Received the Solutions Project transuranic organic waste drum for storage.

**300 Area Cleanup Support** — Completed Curium Source receipt activity from 327. Commenced transport and acceptance of Pacific Northwest National Laboratory (PNNL) legacy waste containers from 324.

**Waste Isolation Pilot Plant Waste Acceptance Criteria (WIPP WAC) Implementation** — The Hanford TRU Program completed the activities necessary for implementation of the revised WIPP WAC and (on May 17, 2002) was the first site to obtain approval from the Carlsbad Area Field Office (CBFO). In addition, RL contracting officer approval was obtained for completion of the work scope associated with this task. The effectiveness of implementation will be evaluated during the upcoming re-certification audit.

## SAFETY

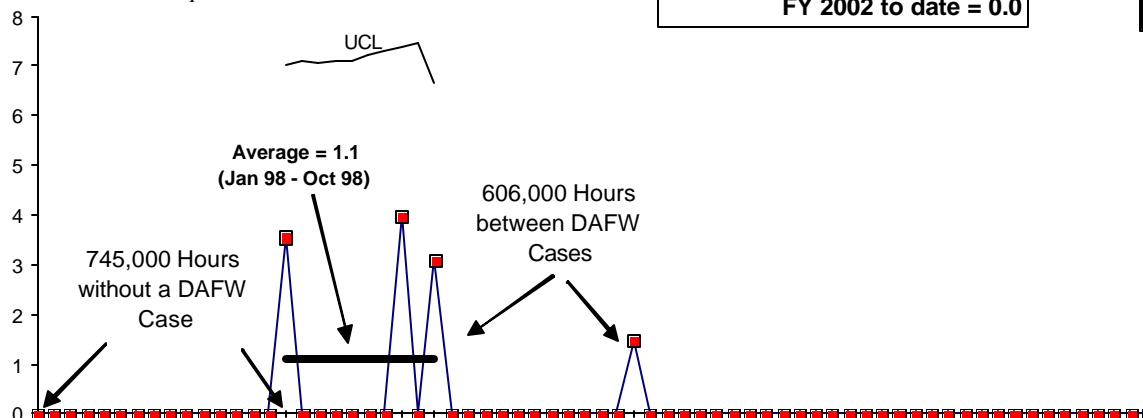
At the end of May 2002, the project reached 3.7 million safe work hours. At the present staff hour utilization rate, the project will achieve 4 million safe hours around or shortly before mid-August. The last days-away injury occurred in October 1999. Fiscal year to date, there have been three OSHA recordable injuries, resulting in a Recordable Incident Rate (IR) of 0.7 at the end of May. The FH annual goal is 0.9. FYTD there has been 48 First Aid Only cases.

### Days Away From Work Case Rate

Cases per 200,000 hours

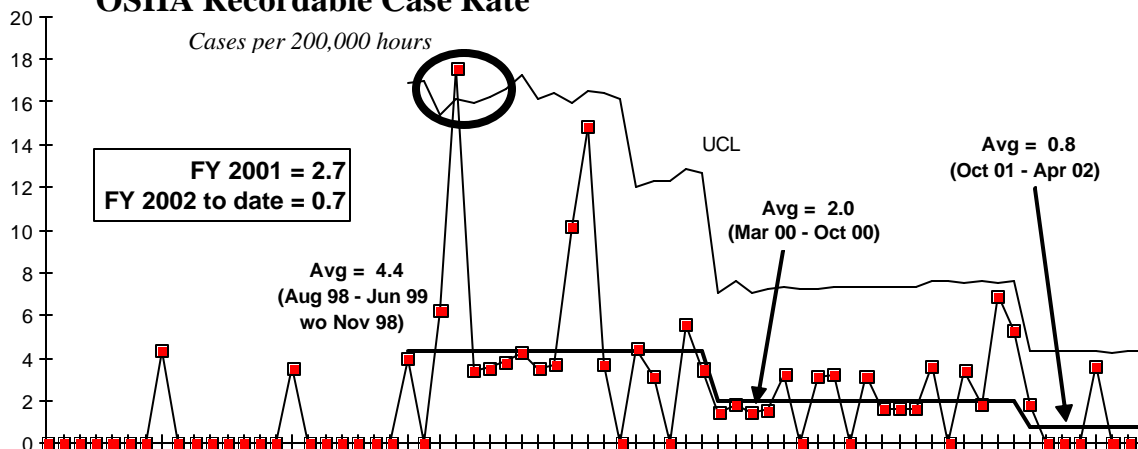
Project Safe Hours = 3,741,742  
FY 2001 = 0.0  
FY 2002 to date = 0.0

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### OSHA Recordable Case Rate

Cases per 200,000 hours

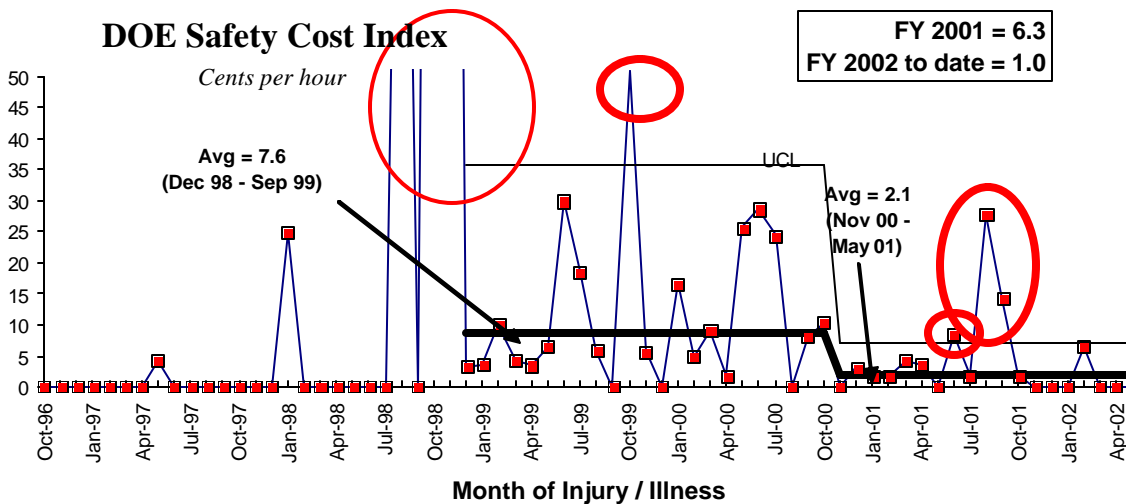


### DOE Safety Cost Index

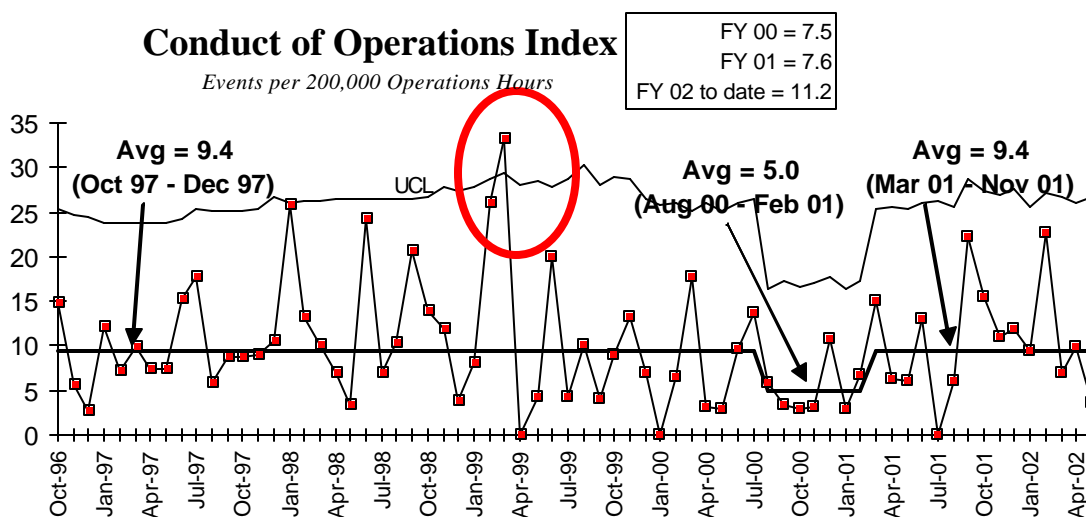
Cents per hour

FY 2001 = 6.3  
FY 2002 to date = 1.0

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## CONDUCT OF OPERATIONS



## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

### BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

No breakthroughs or opportunities for improvement are identified at this time.

## UPCOMING ACTIVITIES

**Accelerate Readiness to Receive SNF K Basin Sludge** — 1) Continue Contractor ORR for movement of Shippingport (PA) fuel, 2) Support activities to receive and store K Basin sludge, and 3) Accelerate T Plant Canyon cell cleanup.

**MLLW Treatment** — Contract negotiations are progressing to allow additional non-thermal MLLW treatment at ATG during the fourth quarter of FY 2002 and during FY 2003. Efforts continue to secure technology demonstration funding to perform thermal desorption treatability tests at Perma-Fix.

**TRU Program Recertification Audit** — The recertification audit of the Hanford TRU Waste Program is scheduled for June 24-28, 2002. The annual audit is required to maintain the certified status of Hanford's TRU Waste Program and retain the ability to certify and ship TRU waste to the Waste Isolation Pilot Plant.

**TRU Waste Retrieval** — Planning is underway for a TRU Retrieval mockup. The mockup will include clean drums and boxes in a configuration similar to the retrieval trenches, and will allow operations personnel to validate retrieval planning efforts prior to excavating TRU drums. Expect to incorporate the Documented Safety Analysis (DSA) comments and receive the Safety Evaluation Report from RL approving the DSA by July 18, 2002.

**Plutonium Finishing Plant Support** — Continue to support residues processing with shipment of the new Sand, Slag and Crucible waste stream through FY 2003.

**300 Area Cleanup Support** — Continue support to the 324 Fuels Removal Project, 327 Facility Cleanout, and the 300 Area Accelerated Closure Project.

**Waste Encapsulation and Storage Facility (WESF) Operations** — Complete removal of chemical lines in the Aqueous Makeup Unit (AMU). Begin K-1 filter change. Support the accelerated capsule disposition initiative.

**Liquid Waste Processing** — Continue groundwater processing at the 200 Area Effluent Treatment Facility. Two 242-A evaporator campaigns are scheduled for later summer and early fall.

**Hanford RCRA Permit Modification E** — In accordance with the approved Settlement Agreement, the conditions of Hanford RCRA Permit Modification E (CWC and WRAP) are effective on June 25, 2002. Waste Management Project personnel are working to complete the final actions necessary for implementation.

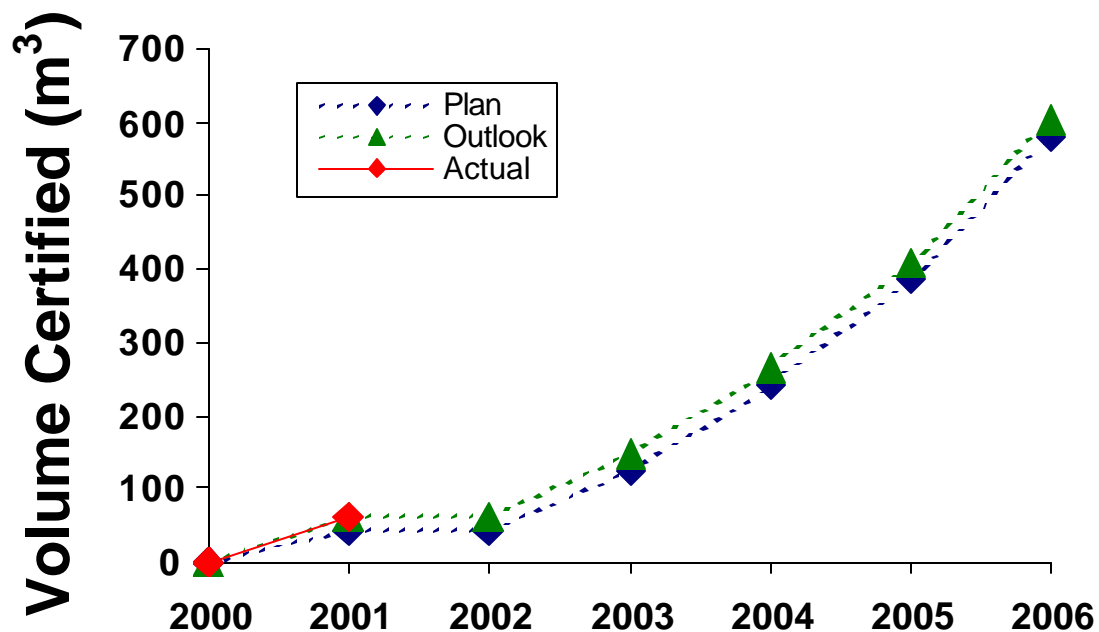
## MILESTONE ACHIEVEMENT FH Contract Milestones

Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status / Comment
M-19-00	Complete Treat/Disp 1,644 CM of CH-LLMW	TPA Enforceable	09-30-02	10-23-00	10-23-00	COMPLETE
M-7-1E	Complete T Plant preparation for storage of K Basins sludge	PI Base	10-30-02		NOV-02	Schedule recovery underway.
M-7-2A	Complete ORR for K Basins Sludge Receipt	PI Base	10-30-02		TBD	Working sludge container issue with SNF.
M-91-12A	Treat 240 Cubic Meters by 12/31/2002	TPA Enforceable	12-31-02		12-31-02	TPA renegotiation scheduled to be completed in June 2002.
M-91-20	T Plant ready to rec. canister of K Basin floor pit sludge	TPA Enforceable	12-31-02		12-31-02	ON SCHEDULE
M-26-05J	Prep Biennial Tritium Treatment Tech Evaluation Report	TPA Enforceable	08-31-03		08-31-03	ON SCHEDULE
M-7-2B	Complete Readiness Assessment K Basins Canister & Fuel Sludge Receipts	PI Base	01-01-04		01-01-04	ON SCHEDULE
M-7-3B	De-Post T Plant Canyon as Airborne Radiation Area	PI Stretch	01-01-04		01-01-04	ON SCHEDULE

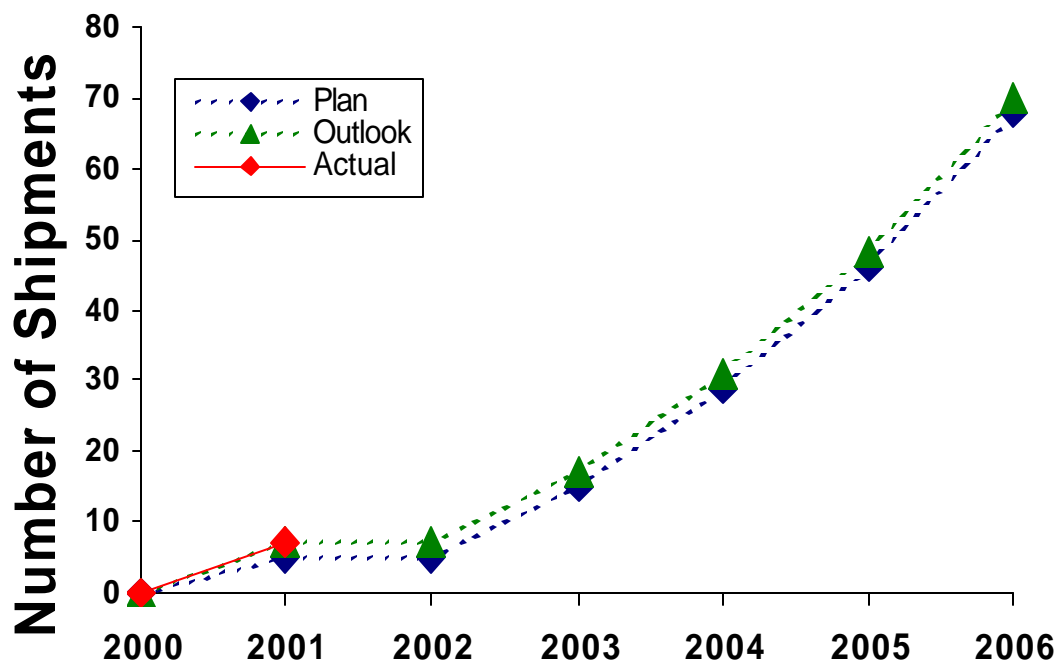
M-91-22	T Plant ready to rec. Canister & fuel wash sludge from K Basin	TPA Enforceable	02-29-04		02-29-04	ON SCHEDULE
M-91-07	Complete W -113 for Post 1970 CH TRU / TRUM Retrieval	TPA Enforceable	09-30-04		09-30-04	TPA renegotiation scheduled to be completed in June 2002.
M-1-2	Consolidate Sitewide SNF in 200 A Dry Storage	PI Base	02-28-05		02-28-05	ON SCHEDULE
M-26-05L	Prep Biennial Tritium Treatment Tech Evaluation Report	TPA Enforceable	08-31-05		08-31-05	ON SCHEDULE
M-5-2	Complete Thermal Treatment 600 m <sup>3</sup> MLLW by 12/31/05	PI Base	12-31-05		12-31-05	ON SCHEDULE
M-5-1B	Complete Treatment / Disposal 9820 m <sup>3</sup> of MLLW	PI Stretch	06-30-06		06-30-06	ON SCHEDULE
M-7-3C	Clear Remaining Stored Equipment from T Plant Canyon Deck	PI Stretch	06-30-06		06-30-06	ON SCHEDULE
M-4-1D	Retrieve 15,200 Suspect TRU Waste	PI Stretch	09-30-06		09-30-06	ON SCHEDULE
M-6-1A	Certify 580 m <sup>3</sup> of TRU waste	PI Stretch	09-30-06		09-30-06	ON SCHEDULE
M-6-1B	Complete 68 TRU Waste Shipments to WIPP	PI Stretch	09-30-06		09-30-06	ON SCHEDULE

## PERFORMANCE OBJECTIVES

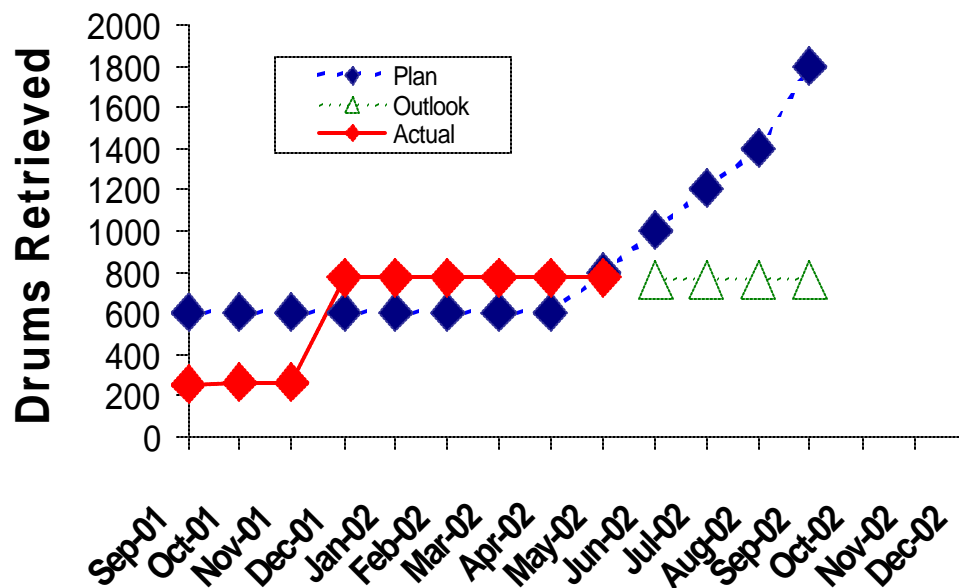
### CERTIFY TRU WASTE (FHI-M6)



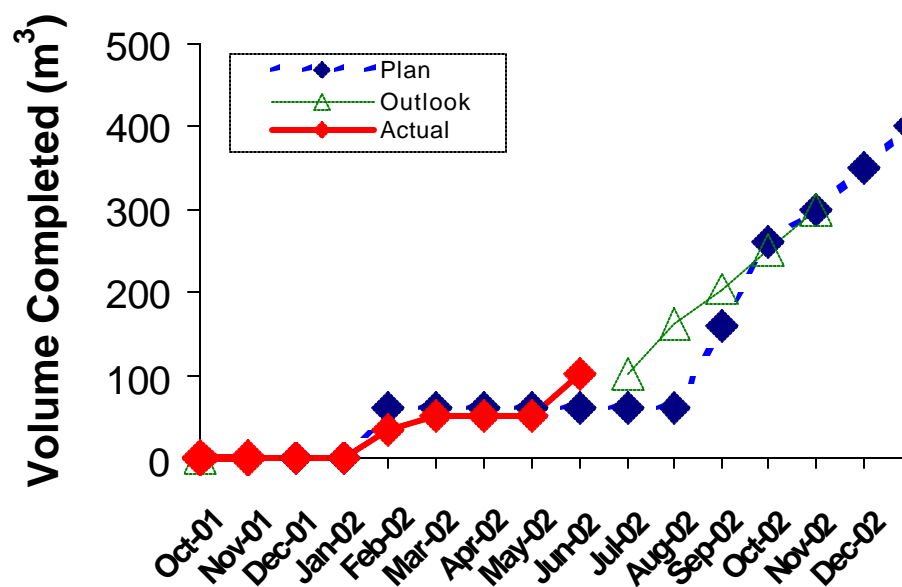
### SHIP TRU WASTE (FHI-M6)



### RETRIEVE TRU WASTE (FHI-M4)

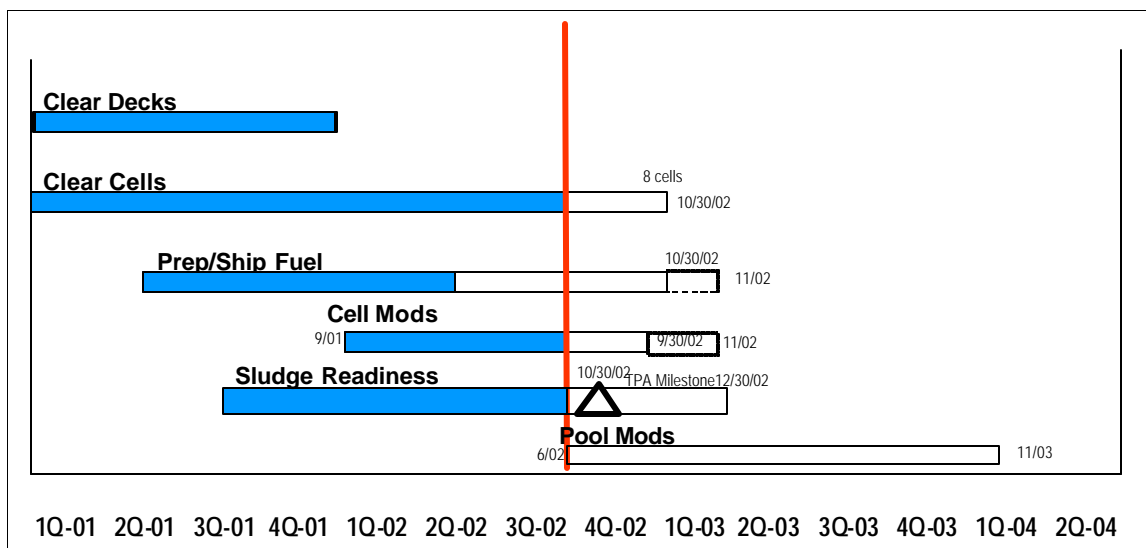


### TREAT AND DISPOSE MLLW (FHI-M5)





## ACCELERATE READINESS TO RECEIVE K-BASIN SLUDGE (FHI-M7)



## FY 2002 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES FY TO DATE STATUS – (\$000)

		FYTD							
		BCWS	BCWP	ACWP	SV	%	CV	%	BAC
PBS CP02	SW Storage & Disposal	\$ 7,040	7200	\$ 7,534	\$ 160	2%	\$ (335)	-5%	\$ 11,529
WBS 3.3.2.1									
PBS CP02	MLLW Treatment	\$ 727	\$ 367	\$ 363	\$ (360)	-50%	\$ 4	1%	\$ 1,458
WBS 3.3.2.2									
PBS CP02	SW Treatment	\$ 6,576	\$ 6,318	\$ 9,618	\$ (258)	-4%	\$ (3,299)	-52%	\$ 10,851
WBS 3.3.2.3									
PBS CP02	TRU Program	\$ 8,500	\$ 8,406	\$ 7,569	\$ (94)	-1%	\$ 837	10%	\$ 13,337
WBS 3.3.2.4									
PBS CP02	WESF	\$ 4,870	\$ 4,866	\$ 4,524	\$ (4)	0%	\$ 342	7%	\$ 7,633
WBS 3.3.2.5									
PBS CP02	200 A LWPF	\$ 10,011	\$ 9,924	\$ 9,405	\$ (87)	-1%	\$ 519	5%	\$ 15,836
WBS 3.3.2.6									
PBS CP02	Project Management	\$ 13,053	\$ 12,958	\$ 11,668	\$ (95)	-1%	\$ 1,290	10%	\$ 19,158
WBS 3.3.2.9									
<b>Total</b>		<b>\$ 50,776</b>	<b>\$ 50,038</b>	<b>\$ 50,679</b>	<b>\$ (738)</b>	<b>-1%</b>	<b>\$ (642)</b>	<b>-1%</b>	<b>\$ 79,802</b>

## FY TO DATE SCHEDULE / COST PERFORMANCE

The \$0.7 million unfavorable schedule variance was primarily due to MLLW Treatment production limitations at ATG, Inc. while under Chapter 11. Also, and the T Plant Operational Readiness Review (ORR) for the spent fuel has not been completed due to implementing corrective actions. The \$0.6 million unfavorable cost variance was primarily due to increased costs for the T Plant spent fuel removal ORR preparation and assessment corrective actions. This is offset by the favorable variance from the FY 2001 carryover workscope costing less than planned, contracts not being placed and credit taken for the TRU Program for work completed in FY 2001.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

### Schedule Variance Analysis: (-\$0.7M)

#### MLLW Treatment — 3.3.2.2/CP02

**Description/Cause:** The unfavorable schedule variance is a result of treatment production being limited at ATG while under Chapter 11.

**Impact:** The TPA milestone M-91-12A is unachievable.

**Corrective Action:** Some non-thermal activities have been identified and are proceeding. Formal notification to RL that TPA milestone M-91-12A is unachievable was submitted February 11, 2002.

### Cost Variance Analysis: (+ \$0.6 M)

#### SW Treatment — 3.3.2.3/CP02

**Description/Cause:** The unfavorable cost variance is due to the increased costs for the T Plant Readiness Assessment preparation and assessment corrective actions, offset by FY 2001 carryover workscope costing less than plan.

**Impact:** T Plant will be over-run at year end.

**Corrective Action:** Actions have been implemented to resolve cost impacts to the WM Project.

#### TRU Program— 3.3.2.4/CP02

**Description/Cause:** The favorable cost variance is due to BCWP taken in October for three WIPP shipments completed in FY 2001 and FY 2001 carryover work scope costing less than plan.

**Impact:** There is no significant project impact at this time.

**Corrective Action:** No corrective action needed.

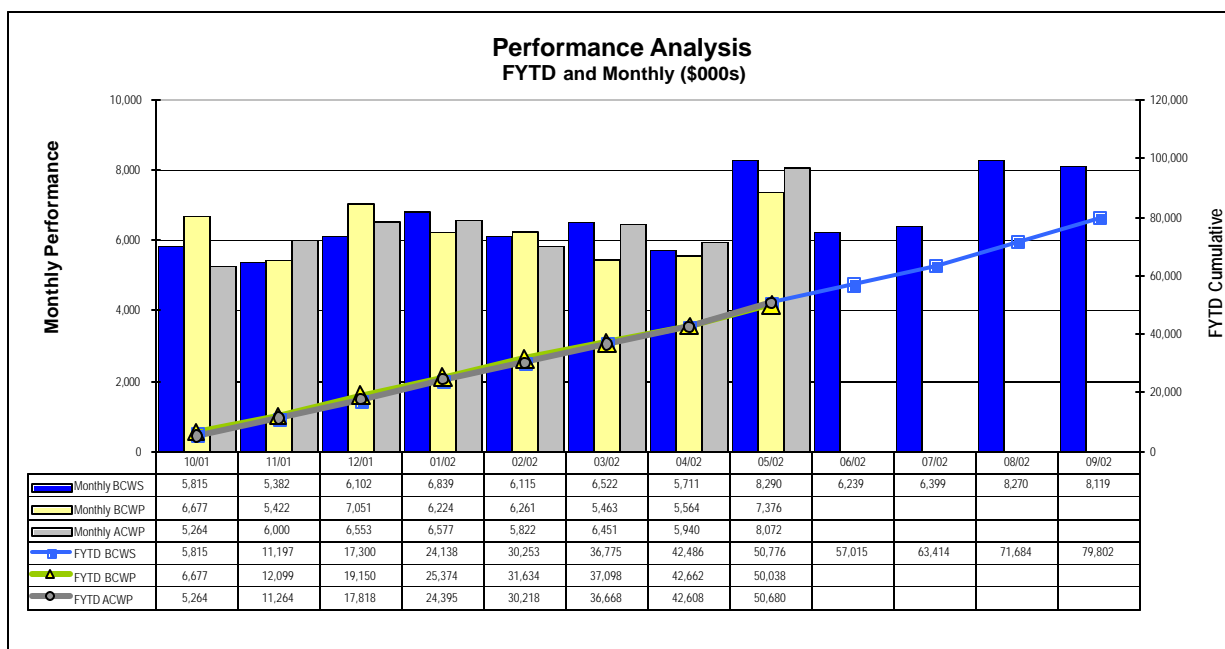
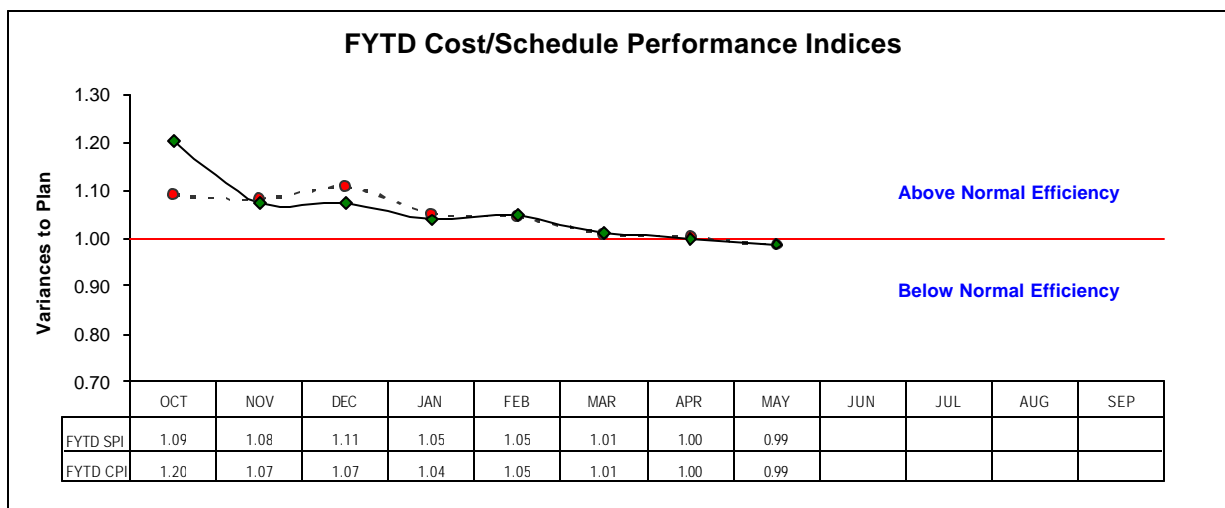
#### Project Management — 3.3.2.9/CP02

**Description/Cause:** The favorable cost variance is a result of contract work not being required for the Solid Waste Environmental Impact Statement and the Canyon Disposition Initiative; labor efficiencies; and a passback of forfeited fee.

**Impact:** This results in a savings for WM.

**Corrective Action:** No corrective action needed.

## COST / SCHEDULE PERFORMANCE (MONTHLY AND FYTD)



## FUNDS MANAGEMENT

### FYTD FUNDS VS. SPENDING FORECAST (\$000)

	FH Funds Reallocation	FYSF	Variance
<b>3.3.2 Waste Management CP02</b>	\$ 81,118	\$ 81,118	\$ -
<b>Total</b>	\$ 81,118	\$ 81,118	\$ -

NOTES: (1) FH Reallocation reflects an FYSF adjusted for scope deletions, deferrals, and identified savings to address funding shortfalls, additional unplanned scope, and cost increases.

## ISSUES

### Technical Issues

**Issue:** Recovery of T Plant Readiness to move Shippingport Fuel.

**Impact/Status:** A recovery plan has been developed and implemented. Key elements include enhanced staffing, increased matrixed support, and the use of onsite and offsite mentors.

**Corrective Actions:** Management Self-Assessment (MSA) in progress. Declare readiness for contractor operational readiness review to be conducted in June 2002. (J. A. Van Vliet).

**Issue:** T Plant Canyon Cell Cleanout and Modification Progress.

**Impact/Status:** Cell cleanout is on schedule. Cells 3L, 10L, and 15L have been cleaned out. Sludge storage level support systems and secondary containment systems have been placed in all three cells.

**Corrective Actions:** Complete modification, including electrical support cabling installation of the first cell by June 30, 2002 and all cells before fuel movement in mid August. (B. V. Burrow/W. W. Rutherford). Utilize overtime to maintain progress (B. V. Burrow) until second shift operations implemented in August 2002 (B. V. Burrow/F. A. Blowe, Jr.).

### External Issue

**Issue:** Lack of MLLW Treatment Capacity.

**Impact/Status:** ATG's financial status has adversely impacted production rates. Alternative treatment plans must be identified.

**Corrective Actions:** Working with ATG to develop a new fourth quarter of FY 2002 contract with option for FY 2003 based on repricing by ATG. LLW compaction contract will complete this FY (W. J. Hoogendoorn/L. T. Blackford). Actions underway to place a Broad Spectrum contract for the fourth quarter of FY 2002 (L. T. Blackford). Continue onsite treatment/disposal efforts (L. T. Blackford).

## DOE Requests

**Issue:** Buried TRU Drum Retrieval Behind Schedule.

**Impact/Status:** Retrieval Documented Safety Analysis (DSA) is critical path and behind schedule due additional time needed to resolve informal comments from the RL Authorization Basis Document (ABD). All other areas of project start-up are in development, but constrained by resource availability.

**Corrective Actions:** DSA comment resolution in progress; document revisions to RL by June 28, 2002. Approved positions planned to be filled by July; personnel recruitment actions underway (R. D. Greenwell).

**Issue:** Resolve CWC Fire Hazards Analysis (FHA) and Safety Basis Concerns Identified in Fire Protection System Assessment.

**Impact/Status:** RL reported 11 issues from the assessment related to:

1) sprinkler systems design and reliability, 2) authorization basis document deficiencies, 3) disconnects between FHA and safety analysis, and 4) improvements needed in facility access control/work authorization. FH identified two positive Unreviewed Safety Questions (USQs) and implemented interim controls. FH self-identified a related positive USQ on disconnects between FHA and safety analysis at the Low Level Burial Grounds facility. Letter Justification for Continued Operations (JCO) documenting interim controls established by FH to maintain facility safety is in review (President's Office) for transmittal to RL. Assessment responses letter that details deficiency evaluation/corrective actions in response to assessment is in review (President's Office) for transmittal to RL. Letter identifying pre-existing conditions to contract transmitted to RL.

**Corrective Actions:** Submit letter to RL requesting direction on issues outside of contract work scope by June 28, 2001. Submit letter to RL requesting approval of scope, assumptions, and analysis methodology for new CWC/LLBG JCO & FHAs by June 28, 2001. Submit new CWC/LLBG JCO & FHA's to RL as acceleration of the Master Documented Safety Analysis (estimated three months following methodology letter approval). (R. D. Greenwell).

## REGULATORY/DOE ISSUES

Nothing to report at this time.

## BASLINE CHANGE REQUESTS CURRENTLY IN PROCESS

BCR No./ Level 4 WBS	Date Originated	Description	Impact		Date Approved	Status
			Days	Dollars (\$000s)		
FH-02-011	2/28/2002	10CFR830 Phase II compliance		1,700		At RL